Why Data Management and Data Governance Matter

Better decision-making, operational efficiency, and compliance are just a few of the outcomes of a winning data strategy

Data is a highly valuable asset for any organization. It is the raw material to drive strategic decisions that are crucial to obtain operational optimization, gain invaluable customer insights, and forecast production and distribution.

With proliferation of data, data management has become a crucial aspect of the day-to-day functioning of organizations. New age technologies like analytics, in-memory computing, data cleansing etc. are becoming indispensable to gather insights. Moreover, one of the major aims of managing data effectively is to centralize its access, so that different departments from the organization have same-time access to it to drive collaborative and holistic efforts. Some of the ways to manage data effectively are:

1. Data ingestion – This part deals with collection and acquisition of structured or unstructured data, processing of events where data was utilized to make sense of it, and utilizing the data from legacy enterprise systems.

2. Data storage and preparation – This part deals with cleansing and enriching the data to make it suitable for analytics operations. Metadata management is also an important aspect here, considering use of referencing due to vast amount of data. All this data is managed in data warehouses, which act as storage places and are referred to for gathering insights.
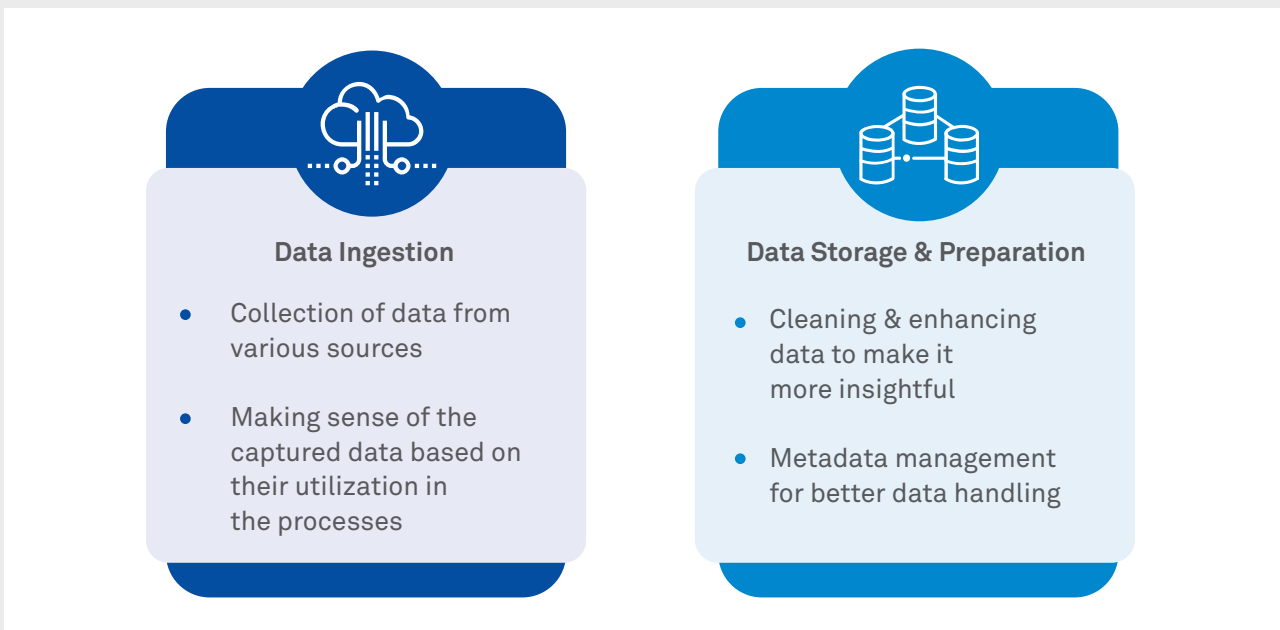

Data Ingestion

- Collection of data from various sources

- Making sense of the captured data based on their utilization in the processes

Data Storage & Preparation

- Cleaning & enhancing data to make it more insightful

- Metadata management for better data handling

Figure 1. Effective data management

Why is data management important?

Data management is the fundamental requirement for enabling subsequent processes of data crunching and analysis. Data and analytics have outpaced the broader IT services market

growth and enterprises are focusing on modern technologies like AI and ML to ensure the availability of high quality data. If successfully implemented, data management can help in realizing long-term benefits such as:

a. **Improved operational efficiency –** As the data gets stored and sorted in a logical manner, processing becomes easier, hence reducing the time and complexity. This significantly saves the effort required in measuring, monitoring and remediating the data.

b. **Enhances automation potential and business outcomes –** Many of the data processing activities get automated because of the repetitive nature observed during the processing stages. Properly cleansed and classified data becomes a major source of determining descriptive, predictive and prescriptive measures for making changes in the business model to improve processes and outcomes.

c. **Data quality and compliance –** With the introduction of technologies like Artificial Intelligence, Machine Learning, Natural Language Processing etc. data ingestion, preparation and storing becomes quite systematic, this in turn improves the overall quality. Also, the prebuilt IP used during data management process helps in creating a robust system which is compliant with regulation perspective.

d. **Data becomes a differentiator –** For long, modus operandi has been to be compliant with the data management practices. But now, data management focuses at using data as a tool to provide valuable insights that can potentially be used to drive innovations.

Improved operational efficiency
- Saves on time & effort of employees
- Simplifies complex processes

Quality & compliance
- Systematic storage
- Fulfills regulatory needs

Enhanced automation potential
- Repetitive activities can be automated

Data as a differentiator
- Insights for driving business decisions

Figure 2. Benefits of efficient data management

Data Governance: Ensuring availability of right data and keeping it safe

While ensuring data is leveraged in the right manner to guide decisions is very important, it still does not encompass the complete spectrum of data management. For data to be of any use, its quality, relevance and availability has to be ensured. Data governance comes into play to cover that. While attributing a direct monetary value to this function is not easy, indirect contribution is quite evident. For e.g. – many firms have eliminated huge costs associated with their data ecosystems and also realized numerous analytics and digital use cases worth millions of dollars due to governance. Further, governance takes care of regulatory risks too, which can cost dear in the long run.

Data governance implementation is driven by the top management: they understand and communicate the needs along with associated challenges and limitations. Next, a data governance council is needed to run the governance strategy toward business needs. Here, leaders manage different data domains

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and with time, the processes get refined, reaching quality standards. It should then ideally be linked with the primary objective that the business is striving to achieve which may include – digitization, enterprise resource planning transformation etc. This helps achieve enterprise-wide alignment.

Prioritizing the data domains to target initially is a crucial aspect to speed up things, as focusing on the whole data might make the progress sluggish. So, critical data must be first dealt with high degree of care and quality monitoring. The approach should also be iterative and focused to make sure the results from small changes can be verified in time.

Trends in data management

1. **Augmented data management –** It makes use of AI and ML techniques for optimization and improvement of operations. It has the capability to examine huge chunks of operational data, such as queries and performance data. Then, based on the data in use, the solution can automatically tune operations and modify security, performance and configurations to gain optimal results.

2. **Adoption of cloud –** It is expected that by 2022, public cloud services will be essential for 90% of data and analytics innovations. Data and analytics leaders are still getting their footing right in identifying the use cases that can best exploit the cloud capabilities in market. The focus has shifted from deliberating on the cost incurred for a given service to how much it can give in terms of performance requirements. So, the aim is going to be to prioritize workloads for cloud and then work upon cost optimization, change and innovation acceleration etc.

3. **Boundaries blur data and analytics –** Traditionally considered separately, data and analytics operations will merge as more inclusive solutions enter the market. Technologies and capabilities as well as people and processes supporting the two will be impacted, creating a spectrum of roles. So, communication and collaboration becomes an indispensable tool to manage the change, which will be guided by incorporating solutions catering to both.

4. **Data marketplace –** Organizations have now been buying data to get insights for running their businesses optimally and this trend is only going to rise and accelerate in the coming future. Data marketplaces will act as single platforms where consolidated third party data would be available for use.

Simplifying IT automation and data management

Over the years, Wipro Enterprise Operations Transformation (EOT) has engaged itself in data management projects across industries like banking, retail, manufacturing, healthcare, IT etc. with the intent of providing structured data consistently for analysis and reporting. We have leveraged Robotic Process Automation (RPA) capabilities to drive our data management service for capturing and cleaning data, correct data defects and address issues pertaining to dummy data.

With this rich experience across varied industries, we have the execution and implementation capabilities that is highly complementary to technology companies in the data management and governance field. We partner with data management and governance solution companies like Winshuttle, which provides platforms that combine process automation and data stewardship capabilities.

We are

• Among Top 10 in HFS Triple A Trifecta (Automation, AI, & Analytics)

• Recognized as leader in Advanced Analytics & Insights Services PEAK Matrix Assessment by Everest

• A leader with over 900 successful data management implementations

● About the authors

Vartul Mittal

Vartul Mittal is a technology and innovation specialist. Vartul focuses on helping clients accelerate their digital transformation journey. He has 14+ years of global business transformation experience in management consulting and global in-house centers in intelligent automation, advanced analytics and cloud adoption.

Vishal Yadav

Vishal Yadav leads transformation go-to-market activities for iCORE, Wipro with a special focus on alliances. He manages growth marketing and demand generation initiatives for automation and new-age SaaS platforms and solutions.